

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings.

Listing of Claims:

Claims 1-20. (Canceled).

Claim 21. (Currently amended) A kit for carrying out a method ~~as claimed in any of the preceding claims~~ of detection of a target nucleotide sequence in a nucleic acid molecule which comprises:

- (a) an oligonucleotide ~~probes~~ probe capable of binding to a target nucleic acid ~~molecules~~ molecule containing the target nucleotide ~~sequences~~ sequence;
- (b) means for selective labelling of the oligonucleotide ~~probes~~ probe; and
- (c) a nucleotide ~~sequences~~ sequence complementary to the oligonucleotide ~~probes~~, preferably immobilised on a solid support probe.

Claim 22 (new) A kit as claimed in claim 21 wherein the nucleotide sequence of (c) is fully complementary to the oligonucleotide probe.

Claim 23 (new) A kit as claimed in claim 21 wherein the oligonucleotide probe is 20 to 30 nucleotides in length.

Claim 24 (new) A kit as claimed in claim 21 wherein the means (b) for selective labelling of the oligonucleotide probe provides for incorporation of a labelled nucleotide.

Claim 25 (new) A kit as claimed in claim 24 wherein means (b) for selective labelling of the oligonucleotide probe comprises a labelled nucleotide.

Claim 26 (new) A kit as claimed in claim 25 wherein the labelled nucleotide is a labelled dideoxynucleotide.

- Claim 27 (new)      A kit as claimed in claim 24 wherein the means for selective labelling of the oligonucleotide probe comprises one or more labelled dideoxynucleotides and one or more unlabelled dideoxynucleotides.
- Claim 28 (new)      A kit as claimed in claim 27 wherein the means for selective labelling of the oligonucleotide probes comprises one labelled dideoxynucleotide and three unlabelled dideoxynucleotides.
- Claim 29 (new)      A kit as claimed in claim 21 wherein the oligonucleotide probe is designed with one or more mismatches at the 3'-end to non-target nucleotide sequences.
- Claim 30 (new)      A kit as claimed in claim 21 wherein the sequence complementary to the labelled oligonucleotide is immobilised on a solid support.
- Claim 31 (new)      A kit as claimed in claim 30 wherein the solid support is a membrane strip or nucleic acid chip.
- Claim 32 (new)      A kit as claimed in claim 21 further comprising (d) means to amplify the nucleic acid molecule which contains the target sequence.
- Claim 33 (new)      A kit as claimed in claim 32 which further comprises a competitor nucleic acid molecule for coamplification with the nucleic acid molecule which contains the target sequence.
- Claim 34 (new)      A kit as claimed in claim 33 wherein the competitor molecule comprises a recognition sequence which is complementary to a competitor oligonucleotide probe.
- Claim 35 (new)      A kit as claimed in claim 33 further comprising a competitor oligonucleotide probe.
- Claim 36 (new)      A kit as claimed in claim 35 wherein the competitor oligonucleotide probe

is capable of being selectively labelled after hybridisation to the competitor molecule.

Claim 37 (new)      A kit as claimed in claim 36 further comprising the means to detect said labelled competitor oligonucleotide probe.

Claim 38 (new)      A kit as claimed in claim 37 wherein the sequences which are complementary to the oligonucleotide probe are immobilised on a solid support in discrete, pre-determined positions.

Claim 39 (new)      A kit as claimed in claim 21 wherein the target nucleotide sequence is characteristic of a particular organism or group of organisms.

Claim 40 (new)      A kit as claimed in claim 39 which comprises a plurality of different oligonucleotide probes, each probe species being capable of binding to a different target nucleotide sequence, each target sequence being characteristic of a particular organism or group of organisms.